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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,450	08/31/2001	Atsushi Hohkita	381NP/50238	9456

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EXAMINER

TRIEU, THAI BA

ART UNIT

PAPER NUMBER

3748

DATE MAILED: 01/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,450

Applicant(s)

HOHKITA ET AL.

Examiner

Thai-Ba Trieu

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,30-34,39 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) 5-29,35-38,40-43 and 48-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,30-34, 39, and 44-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2&6. 6) ☐ Other:

DETAILED ACTION

This Office Action is in response to the Election filed December 16, 2002. Applicants elected the species of Figure 10, and claims 1-4, 30-34, 39, 40, and 44-47. However, claim 40 does not read on Figure 10; therefore claim 40 and the non-elected claims 5-29, 35-38, 40-43, and 48-57 have not been examined on their merits.

Specification

The disclosure is objected to because of the following informalities:

- On Page 4, line 17, ***“hosing”*** after ***“a bearing”*** should be replaced by ***-- housing --***.
- On Page 7, line 18, ***“2cfor”*** after ***“turbine scroll flow passage”*** should be replaced by ***-- 2c for --***.
- On Page 8, line 10, ***-- 11 --*** should be inserted after ***“driving actuator”***.

Appropriate correction is required.

Claim Objections

Claims ***3-4, 31-32, 34, 39 and 44-47*** are objected to because of the following informalities:

- In claims ***3-4, 31-32, 34, 39 and 44-47***, line 1, ***“An”*** before ***“exhaust turbo-supercharger”*** should be replaced by ***--The --***.

- In claim 39, line 2, the limitation of ***“a porous material on an inner wall surface of the turbine flow passage”*** lack antecedent basis in the specification. Applicants should insert this subject matter into the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

- In claim 40, ***“being capable of making”*** renders the claim indefinite.

Applicant should rewrite as -- ***making*** --.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 30-34, 44, 46-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Nohira (Patent number JP 356018026 A).

Regarding claims 1, and 3-4, Nohira discloses an exhaust gas turbine for an internal combustion engine connected to an exhaust pipe of the engine, which comprises:

an exhaust gas turbine inlet port (via 22) for guiding exhaust gas into said turbine (T);

an exhaust gas catalyst inlet port (via 26) for guiding the exhaust gas to a catalyst (24), the exhaust gas after passing through said turbine being guided into said exhaust gas catalyst inlet port; and

an open/close valve (29) for opening and closing said exhaust gas catalyst inlet port ; and being arranged in said exhaust gas catalyst inlet port or in an inlet of said exhaust gas passage guiding the exhaust gas into said catalyst (24) (See Figure); and a supercharger (C) disposed in an intake air passage of said Internal combustion engine being attached so as to be driven by said turbine (T) (See Figure, and Abstract)

Regarding claims 2 and 46-47, Nohira discloses an exhaust gas turbine for an internal combustion engine, which comprises:

an exhaust gas passage (via 26) for guiding exhaust gas into a catalyst (24), said exhaust gas passage being connected to an exhaust passage (12) of said engine;

a bypass exhaust passage (via 22) integrated with said exhaust gas passage as a unit; and

a turbine (T), which is attached to said bypass exhaust passage (22) (See Figure, and Abstract);

an open/close valve (29) being arranged in said exhaust gas catalyst inlet port or in an inlet of said exhaust gas passage guiding the exhaust gas into said catalyst (See Figure); and

a supercharger (C) disposed in an intake air passage of said internal combustion engine being attached so as to be driven by said turbine (T) (See Figure).

Regarding claims 30-32, 34 and 44, Nohira discloses an exhaust turbo-supercharger for an internal combustion engine, in the internal combustion engine comprising the exhaust turbo-supercharger (C and T; 13), which comprises an exhaust bypass flow passage (via 26) independent of and arranged in parallel with a turbine flow passage for guiding exhaust gas into said turbine impeller (See Figure);

a flow passage resistance of the exhaust bypass passage being smaller resistance of the turbine flow passage (the diameter of the exhaust bypass is greater than the diameter of the turbine flow passage, therefore the resistance in the exhaust bypass passage should obviously be smaller, See Figure);

a catalyst (24) including a catalyst-mounting portion in a turbine outlet portion (See Figure);

an exhaust bypass flow passage (via 26) independent of and arranged in parallel with a turbine flow passage (via 22) for guiding exhaust gas into a turbine impeller is formed, and an exhaust flowing portion from an exhaust manifold to the exhaust bypass passage and a turbine outlet are connected by a straight pipe (See Figure); and

a mechanism (32) in an exhaust flow passage, said mechanism making exhaust gas flow out by bypassing a turbine (T) (See Figure).

Regarding claim 33, Nohira discloses an exhaust turbo-supercharger for an internal combustion engine, in the internal combustion engine comprising the exhaust turbo-supercharger, which comprises:

an exhaust bypass flow passage (via 26) which is independent of and arranged in parallel with a turbine flow passage (via 22) for guiding exhaust gas into a turbine impeller;

a valve seat plane and an exhaust bypass valve (29) in said exhaust bypass flow passage, a flow passage resistance of said exhaust bypass flow passage being smaller than a flow passage resistance of the turbine flow passage (See the rejection of claim 31 above); and

a catalyst (24) mounting portion in a turbine outlet portion (See Figure).

Claims 1-4, 30, 32, 34, and 44-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iwamoto (Patent Number 4,437,311).

Regarding claims 1-4, 30, 32, 34, 44, and 46-47, Iwamoto discloses the invention as shown in Figure 1, and Column 3, lines 6-39.

Regarding claim 45, Iwamoto further discloses an exhaust gas inlet portion of said exhaust bypass flow passage and said turbine outlet are connected by a straight

pipe, and said exhaust gas bypass valve is opened during a starting period of operation of the internal combustion engine to make exhaust gas flow by bypassing said turbine (See Column 2, lines 45-56).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fernandez (Patent Number FR 2 752 880 a1).

(See Figure 1, Page 6, lines 29-35, and pages 7-12, lines 1-35).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Asaki et al. (Patent Number JP 404370327 A).

(See Figure 1, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Koike (Patent Number JP 404103817 A).

(See Figure 1, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Usui (Patent Number JP 357126516 A).

(See Figure, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lauvin (Patent Number EP 0 266 256 1A).

(See Figure 1, and Column 2, lines 52-63, Column 3, lines 1-65, and Column 4, lines 1-56).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huber (Patent Number DE 195 03 748 A1).

(See Figure 1, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ottowitz (Patent Number DE 43 11 904 A1).

(See Figure 1, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fuoss (Patent Number DE 196 54 026 A1).

(See Figure 1, and Abstract).

Claims 1-4, 30, 32, 34, 44, and 46-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Guimbretiere (Patent Number FR 2 650 860A1).

(See Figure 1, and Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nohira (Patent number JP 356018026 A), in view of Yoshikawa (Patent Number JP 05240193 A).

Nohira discloses the invention as recited above; however, Nohira fails to disclose a porous material applied on an inner wall surface of turbine flow passage.

Yoshikawa teaches that it is conventional in the compressor art, to utilize a thin sheet sound absorbing comprising soft porous material which is coupled to the inner wall surface of the compressor/blower/turbine flow passage (See Figures 1, 3, and 6; and Abstract).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a porous material applied on an inner wall surface of turbine flow passage, as taught by Yoshikawa, to reduce the fluid noise, in the Nohira device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Novak et al. (US Patent Number 6,397,820 B1) disclose a method and a device for controlling combustion engine.

- Novak et al. (US Patent Number 6,390,081 B1) disclose a method and a device for controlling combustion engine.
- Danno et al. (US Patent Number 4,705,001) disclose a device for controlling engine and method thereof.
- Kageyama (Patent Number JP 402259224 A) discloses an exhaust purifying device for a turbocharged internal combustion engine.
- Kibe (Patent Number JP 407332072 A) discloses an exhaust emission control device of a turbocharged internal combustion engine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00), first and second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9302 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

TTB
January 14, 2003



Thai-Ba Trieu
Patent Examiner
Art Unit 3748



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